



Application Serial No.: 10/706,521  
Attorney Docket No.: 2C06.1-010  
PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of: CALLAN, Eoin J.P.

Serial No.: 10/706,521

Filing Date: November 12, 2003

For: **RESPIRATORY MASK**

Board of Patent Appeals and Interferences  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

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Art Unit: 3743

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Examiner: Patel, Nihir B.

)  
February 21, 2006

BOARD OF PATENT APPEALS  
AND INTERFERENCES

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**APPEAL BRIEF UNDER 37 C.F.R. §41.37**

**INTRODUCTION**

This is an appeal to the Board of Patent Appeals and Interferences of the final rejection of Claims 1-11 in the subject application. This Brief is believed to be timely filed. If any extension of time is required, please consider this a request therefor. The requisite fee for this Brief is paid herewith. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account 50-1513.

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Bradley K. Groff

February 21, 2006

Date

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**i. REAL PARTY IN INTEREST**

The real party in interest is the owner and inventor of the present application, Eoin J.P. Callan.

**ii. RELATED APPEALS AND INTERFERENCES**

There are no other known appeals, interferences or judicial proceedings that are related to, will directly affect, or be directly affected by, or have a bearing on the Board's decision in this Appeal.

**iii. STATUS OF CLAIMS**

Claims 1-20 are pending in the application. Claims 1-11 stand finally rejected. Claims 12-20 stand withdrawn.

The appealed claims are Claims 1-11.

**iv. STATUS OF AMENDMENTS**

No amendments have been filed subsequent to final rejection. All amendments filed prior to final rejection have been entered.

**v. SUMMARY OF CLAIMED SUBJECT MATTER**

Independent Claim 1 is directed to a respiratory mask generally of the sort worn by healthcare providers or the general public to prevent transmission of airborne or respiratory contagions, by workers in areas of high concentrations of dust or mold, and the like. [P1:L9-18, P2:L8-20, Figs. 1, 4, 7 and 10 (ref. No. 10)].<sup>1</sup> The mask includes a panel having

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<sup>1</sup>References to the specification herein are by page and line number, in the format "P(page number):L(line number)".

an inner side and an outer side, which panel is typically worn over the maxilla facial region (i.e., over the mouth and nose areas) of a wearer's face, with the inner side against the wearer's face and the outer side facing away from the wearer. [P4:L19 – P5:L15, Figs. 1-12 (ref. No. 12)]. One or more fasteners, such as laces or straps, are affixed to the panel for attaching the mask to a wearer, typically by tying or positioning the fasteners around the wearer's head or ears. [P5:L1-7, Figs. 1-12 (ref. no. 20)]. Previously known respiratory masks were generally non-distinctive and aesthetically displeasing, and it was discovered that the approach of an unknown person wearing such a mask was often perceived as threatening or frightening, particularly by children or injured patients already in traumatic situations. [P1:L20-25, P2:L5-6]. The respiratory mask of the claimed invention includes at least one display originally visible on the outer side of the mask's panel. [P4:L21-26, P5:L8-20, P5:L23 – P7:L12, Figs. 1, 2, 4, 5, 7, 8, 10, 11 (ref. no 18)].

Independent Claim 8 is directed to a method of identifying characteristics of a wearer of a respiratory mask. [P2:L14-22, P6:L24 – P7:L5]. The respiratory mask includes a panel having a first side and a second side [P4:L19 – P5:L15, Figs. 1-12 (ref. No. 12)], and at least one fastener affixed to the panel for securing the mask to the wearer [P5:L1-7, Figs. 1-12 (ref. no. 20)], substantially as described above with reference to Claim 1. The respiratory mask further includes at least one display originally visible from the first side of the mask, as described above. [P4:L21-26, P5:L8-20, P5:L23 – P7:L12, Figs. 1, 2, 4, 5, 7, 8, 10, 11 (ref. no 18)]. The method of the present invention includes providing information regarding specified characteristics of the wearer in the display of the mask. [P2:L14-22, P6:L24 – P7:L5]. For example, in the event of a large outbreak of an infectious disease, masks can be applied to patients during triage to prevent further spread of contagions when the patients cough or sneeze, and the displays on the masks' panels can provide

information regarding the presence of particular symptoms in a given patient, or diagnoses for subsequent treatment. [P6:L24 – P7:L5].

No claim involved in the appeal includes means-plus-function or step-plus-function language under 35 U.S.C. §112, sixth paragraph.

**vi. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The sole ground of rejection to be reviewed in this appeal is the rejection of Claims 1-11 under 35 U.S.C. 103(a), as unpatentable over U.S. Patent No. 4,488,547 to Mason in view of U.S. Patent No. 6,671,886 to Reitz.

**vii. ARGUMENT**

Claims 1-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,488,547 to Mason in view of U.S. Patent No. 6,671,886 to Reitz. Each of the claims presently under appeal includes the provision of “*at least one display originally visible on the outer [or first] side*” of a respiratory mask. The Examiner acknowledges that the face mask of Mason ‘547 does not provide any display originally visible on its outer surface, as claimed. Instead, as the mask of Mason ‘547 is worn for an extended time period, a coloration change resulting from prolonged exposure to moisture in the wearer’s breath takes place in an anhydrous hygroscopic layer of the mask, producing a visible indicator where none was originally visible, signaling that the mask’s protective qualities may be spent and the mask should be exchanged for a new one. Mason ‘547 at column 2, lines 49-55.

The Examiner asserts, however, that Reitz ‘886 discloses a mask with a display (ref. no. 34) originally visible thereon, and that it would have been obvious to apply the display of Reitz ‘886 to the mask of Mason ‘547. Reitz discloses a decorative face mask for use at

sporting events, which is "specifically adapted to conveniently engage a rear portion of a conventional head-wear such as a sports cap." Reitz '886 at column 1, lines 60-62. This arrangement "allows the face mask to be carried upon the head-wear and disposed about the rear of a user's neck during the sporting event", and "[w]hen desired to promote fan and/or sports rally motivation, the face mask may be readily positioned over the face through a simple reversal of the headwear." Column 1, line 63 – column 2, line 1. When positioned over the face, "the mask does not extend over the user's mouth such that the user is not prohibited from drinking, eating, shouting, talking or making other audible sounds." Column 3, lines 30-36.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the references' teachings. Second, there must be a reasonable expectation of success. And third, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In the present case, at least the first and second criteria have not been satisfied and, in fact, are refuted by the art of record.

The Examiner has cited no support whatsoever, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, for the proposed modification of the Mason '547 mask to include the display of Reitz '886. Nowhere in the Office Actions of April 5, 2005 or September 21, 2005 is there even the slightest indication of why one of ordinary skill in the art might seek to modify and combine the teaching of the Mason and Reitz references. Instead, the §103 rejection merely recites that Mason lacks a display as claimed, that Reitz discloses a display, and that it would have been obvious to modify Mason to include Reitz's display. Nothing in either reference is cited to support this

modification. Nor is any general knowledge in the art identified. But a mere assertion that modifications of the prior art to meet the claimed invention would have been obvious because the references separately teach individual aspects of the claimed invention, without identifying some objective reason to combine the teachings of the references, is clearly insufficient to establish a *prima facie* case of obviousness. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000).

Because the Examiner has failed to establish a *prima facie* case of obviousness, the standing rejection of Claims 1-11 under §103 must be overturned on appeal.

While the Applicant has no burden to refute obviousness until a *prima facie* case has been properly established, it is noted that one of ordinary skill in the art clearly would not be motivated to combine the teachings of Mason '547 and Reitz '886 in the manner suggested. As a threshold matter, there is no suggestion in any prior art of record of any reason or need for displaying a sports team logo (as per Reitz) on a surgical mask (as per Mason), or for rallying fans or participants (as per Reitz) during a medical procedure (as per Mason). Nor has any knowledge generally available to one of ordinary skill in the art been identified that would motivate such a modification. Accordingly, other than through the use of improper hindsight reconstruction based on the applicant's own disclosure, the art of record does not disclose or suggest the presently claimed invention. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's own disclosure). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

Moreover, the Mason '547 and Reitz '886 references themselves, in fact, teach away from the Examiner's proposed modification and combination of their disclosures. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). Mason's anhydrous hygroscopic layer is intended to "bring a color contrast into visual discernment", upon exposure to moisture in the user's breath after the mask has been in use for so long as to suffer decreased efficiency. Mason '547 at column 2, lines 49-55. This signals the user and others that mask replacement is appropriate. Column 2, lines 20-23. But the provision of a permanently visible display onto the surface of the Mason face mask, as suggested by the Examiner, would almost certainly render the Mason face mask less effective, if not entirely inoperable, in signaling that it was time to replace the mask. Any permanently visible display on the Mason mask's outer surface would likely obscure (or at the very least would substantially detract attention from) the coloration change of Mason's anhydrous hygroscopic layer that signals the need to replace the mask. Thus, the user would not be prompted to replace the mask upon depletion of its effectiveness, as is Mason's stated objective. Because the Examiner's proposed combination and modification of the Mason and Reitz references would render Mason unsuited for its intended purpose, there is no suggestion or motivation to make the proposed modification. See *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Furthermore, one skilled in the art would not look to such a disparate field of endeavor as that of the Reitz '886 reference to modify the teaching of Mason '547 in the manner proposed. "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In*

*re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). Mason '547 is directed to a surgical-type face mask for preventing contamination during medical procedures, whereas Reitz '886 is directed to an entirely different field of endeavor—namely rallying enthusiasm among sports fans and participants during sporting events. One skilled in the art of designing surgical face masks for preventing contamination during medical procedures would not likely be motivated to seek design inspiration from the field of sports paraphernalia.

The lack of any motivation to modify and combine the references in the manner proposed is also evident from the very different modes of use of the Mason '547 mask and the Reitz '886 mask. The Mason mask is solely intended to be worn over the user's mouth and nose throughout a medical procedure, whereas the Reitz mask is typically attached to a baseball cap and worn on the back of the head until such time as the wearer feels the need to rally other fans or participants in a sporting event (column 3, lines 36-45) and then reversed to cover part of the wearer's face. Because of these very different modes of use, in clearly non-analogous fields of endeavor, one skilled in the art would not seek to modify and combine elements of the references as proposed.

Additionally, the physical structures of the Mason '547 mask and the Reitz '886 mask would render them incompatible with one another for the Examiner's proposed modification and combination of features. The Mason mask is adapted to fit almost entirely over the mouth and nose areas of the user (column 1, lines 49-52, and Fig. 3); whereas the mask of Reitz specifically "does not extend over the user's mouth" (column 3, lines 33-35; column 4, lines 31-32; column 5, lines 60-63), and "a pair of nose holes . . . may be optionally provided through the mask body" (column 6, lines 9-12). One skilled in the art would not seek to combine features of Reitz's open-mouthed mask into a mask such as Mason's that seeks to prevent contamination transferred by breath. And conversely, one

skilled in the art would not seek to import the mouth-covering aspects of Mason's respiratory mask into the Reitz mask, as doing so would impair the wearer's ability to cheer for his or her sports team, which is a principal objective of the Reitz '886 reference. As such, there would clearly be no motivation for one of ordinary skill in the art to modify and combine the references in the manner suggested.

In conclusion, for all of the above reasons it is clear that the presently claimed invention would not have been obvious to one of ordinary skill in the art at the time the invention was made. Accordingly, the rejection of Claims 1-11 under 35 U.S.C. §103 must be overturned on appeal, and the application allowed.

Respectfully submitted,



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viii. CLAIMS APPENDIX

1. A respiratory mask comprising a panel having an inner side and an outer side and at least one fastener affixed to said panel for attaching the mask to a wearer, said respiratory mask further comprising at least one display originally visible on the outer side of said panel.
2. The respiratory mask of Claim 1, wherein the display comprises graphical matter.
3. The respiratory mask of Claim 1, wherein the display comprises text.
4. The respiratory mask of Claim 1, wherein the display comprises graphics and text.
5. The respiratory mask of Claim 2, wherein the display comprises graphics depicting a national flag.
6. The respiratory mask of Claim 2, wherein the display comprises graphics depicting a smiling face.
7. The respiratory mask of Claim 1, wherein the display comprises information regarding a pharmaceutical product.
8. A method of identifying characteristics of a wearer of a respiratory mask, said respiratory mask comprising a panel having a first side and a second side and at least one fastener affixed to the panel for securing the mask to the wearer, said respiratory mask further comprising at least one display originally visible from the first side of the mask, said method comprising providing information regarding specified characteristics of the wearer in the at least one display of the mask.

9. The method of Claim 8, wherein the step of providing information regarding specified characteristics of the wearer in the at least one display of the mask comprises displaying information regarding symptoms of a patient wearer of the mask.
10. The method of Claim 8, wherein the step of providing information regarding specified characteristics of the wearer in the at least one display of the mask comprises displaying triaging information regarding the severity of a medical condition of a patient wearer of the mask.
11. The method of Claim 8, wherein the step of providing information regarding specified characteristics of the wearer in the at least one display of the mask comprises displaying information regarding the qualifications of a medical professional wearer of the mask.

**ix. EVIDENCE APPENDIX**

(none)

**x. RELATED PROCEEDINGS APPENDIX**

(none)